

**ACTIVE THERMAL CONTROL SYSTEM WITH MINIATURE LIQUID-
COOLED TEMPERATURE CONTROL DEVICE FOR ELECTRONIC
DEVICE TESTING**

ABSTRACT OF THE DISCLOSURE

A temperature control system, which includes a miniature liquid-cooled heat sink, is used to provide a controlled temperature surface to an electronic device, such as a semiconductor device, during the testing or burn-in phase. In one embodiment, the system includes a miniature liquid-cooled heat sink device having a monolithic counter-flowing structure. In other embodiments, the system includes a heater, a flow control valve, a controller, and/or sensors.